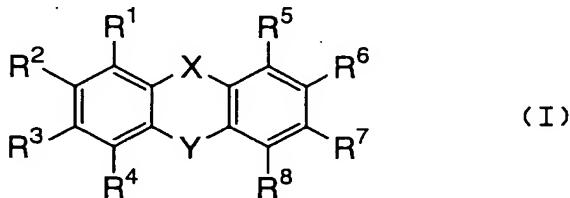


Claims

1. A non-aqueous electrolyte which comprises a non-aqueous organic solvent and a lithium salt, and further contains a 5 compound represented by the following formula (I):



wherein X represents -O-, -S-, -CO- or -SO₂, Y represents a single bond, -CH₂-, -CH₂-CH₂-, -CH=CH- or -CO- and R¹ to R⁸ each independently represent a hydrogen atom, an 10 alkyl group, a phenyl group, or a halogen group, provided that X and Y do not represent -CO- at the same time.

2. The non-aqueous electrolyte according to Claim 1, wherein 15 X represents -O-, -S- or -CO- and Y represents a single bond, -CH₂-CH₂-, -CH=CH- or -CO- (provided that X and Y do not represent -CO- at the same time).

3. The non-aqueous electrolyte according to Claim 1, wherein 20 X represents -O- or -S- and Y represents a single bond or -CO-.

4. The non-aqueous electrolyte according to Claim 1, wherein X represents -O- and Y represents a single bond.

5. The non-aqueous electrolyte according to Claim 1, wherein 25 X represents -CO- and Y represents a single bond, -CH₂-CH₂- or -CH=CH-.

- Sakai Pe* 6. The non-aqueous electrolyte according to any one of Claims 30 1 to 5, wherein the compound represented by the formula (I) is contained in the electrolyte in an amount of 0.01 to 0.8 mmol/g.

7. The non-aqueous electrolyte according to any one of Claims

1 to 6, wherein it is an electrolyte for a non-aqueous secondary battery comprising a cathode containing a lithium metal complex oxide and an anode containing a material which is capable of storing and releasing lithium.

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8. A non-aqueous secondary battery which is equipped with a cathode containing a lithium metal complex oxide, an anode containing a material which is capable of storing and releasing lithium and the electrolyte according to any one of Claims 1 to 7.

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9. A non-aqueous secondary battery which is equipped with a cathode containing a lithium metal complex oxide, an anode containing a material which is capable of storing and releasing lithium and an electrolyte, wherein the cathode comprises the compound represented by the formula (I) according to any one of Claims 1 to 5.

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10. The non-aqueous secondary battery according to Claim 8 or 9, wherein the lithium metal complex oxide is a lithium cobalt oxide, lithium nickel oxide and/or lithium manganese oxide.

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11. The non-aqueous secondary battery according to any one of Claims 8 to 10, wherein the material which is capable of storing and releasing lithium is a carbonaceous material.

A₃

Add
Claims